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I, JULIE BILLINGSLEY, TEAM LEADER EXAMINATION SUPPORT AND SALES hereby certify that annexed is a true copy of the Provisional specification in connection with Application No. 2003905790 for a patent by T.A.C.A. AUSTRALIA PTY LTD as filed on 22 October 2003.

WITNESS my hand this
Fourteenth day of January 2004

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Patents Act 1990

PROVISIONAL APPLICATION

This invention is described in the following statement :

APPARATUS FOR DISPENSING OF PARTICULATE MATERIAL

The present invention relates to an apparatus for the dispensing of a material or measured amount of a welding material from a hopper or like container having a supply of such material. More particularly, the invention relates to an improved apparatus for the dispensing of particulate welding material such as a carbide for welding purposes.

In this specification the word "particulate" includes the case where the material is granulated.

This application is for further improvements to that disclosed in provisional patent application no. 2002 953 139 filed 4 December 2002 and Australian patent no 753910 (61378/00) both in the name of the present applicant.

The present invention is concerned with the partial automation of the apparatus disclosed in patent application no. 2002 953 139.

Accordingly this invention provides electrical means for simultaneously operating or ceasing to operate closure means between a first hopper and second hopper to remove particulate fines.

For preference, a 24 volt electrical circuit is connected to an air solenoid coil to operate the closure means in parallel with a vacuum motor.

Desirably, a switch in the 24 volt portion of the electrical means is operated by means of a separate switch in a 12 volt circuit.

The invention will now be described with reference to a circuit diagram set out in Fig.1. It will be understood that the description is by way of non-limitative example only.

In the circuit 240 volts is supplied to a power filter 1 and then to a transformer 2 where it emerges as 24 volts. A relay switch 3 is supplied in the circuit.

A timing motor 4 is inserted in parallel to measure how long the circuit is in use and hence how long welding is taking place.

An air solenoid coil 5 is inserted in parallel in the circuit to operate the closure means between the first hopper and the second hopper. Thus air solenoid coil 5 operates a mechanical switch (not shown) which in turn operates the closure means between the first hopper and the second hopper.

Power is supplied to a vacuum motor 6 which is connected to the preliminary hopper to remove particulate fines. A capacitor 7 of approximately 10 microfarads is connected around the vacuum motor 6 to stop arcing by bleeding back voltage. It also suppresses noise.

The circuit means further comprises a sub-circuit which supplies 12 volts to a foot switch 8 and a relay coil. The object of this sub-circuit is to allow switch 3 to be opened and closed by the use of a safe voltage. Conveniently switch 8 is foot-operated.

Dated October, 2003

T.A.C.A. Australia Pty Ltd

By their Registered Patent Attorney

JAMES MURRAY

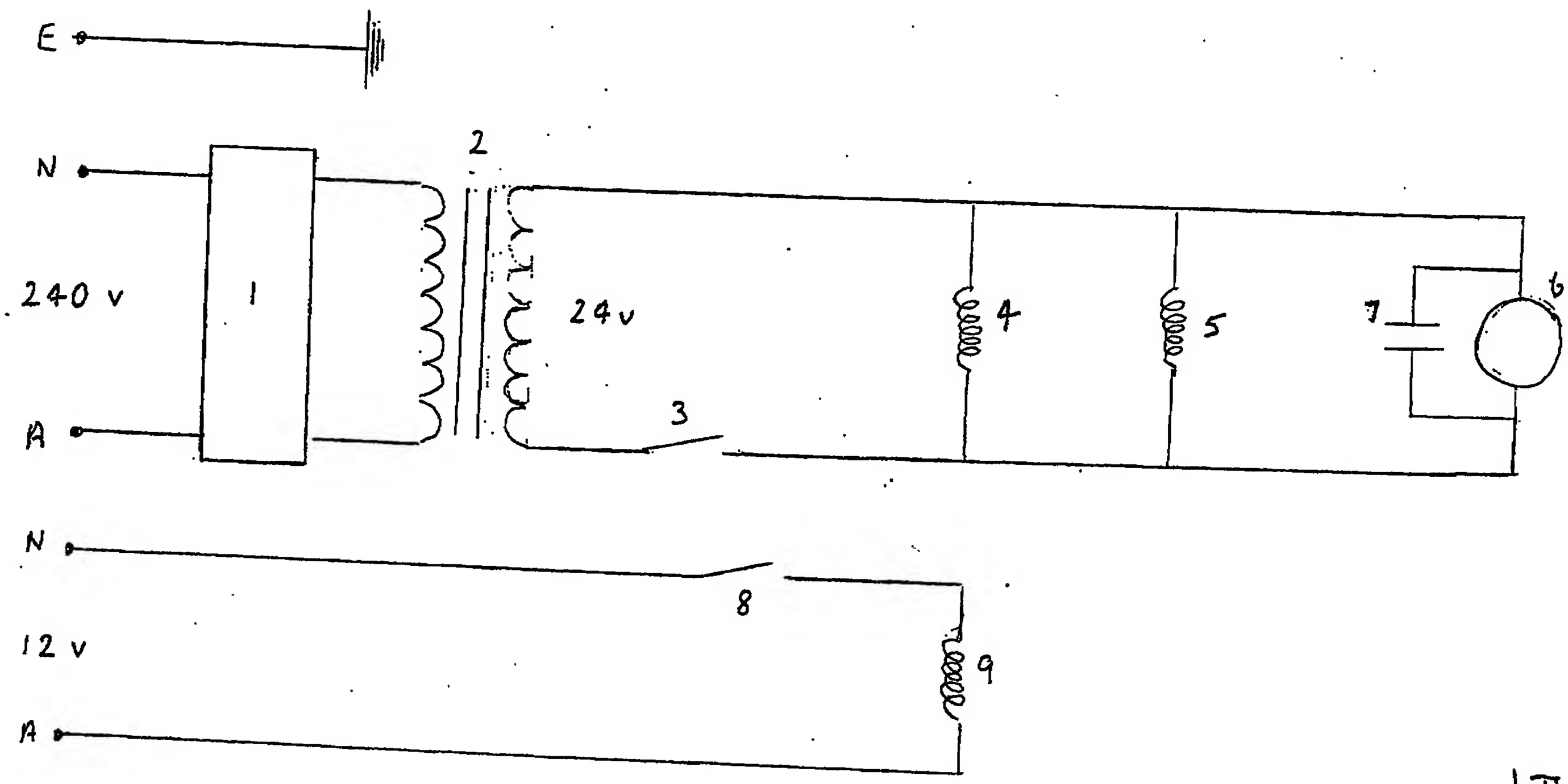

Fig 1